

Estimate of the ILD coil cost from the WBS revised from CMS and the CMS costing as known in 2008.

To get the actual number the ILCU has been taken as 1 CHF ~ 1\$ ~ 0.77 €.

10% inflation has been added. The scaling is different by items, it can be linked to the coil length "L" and diameter "D" or to the cable length "LD".

The length ratio (ILD/CMS) is: $7.35 / 12.5 = 0.59$

The diameter ratio is : $3.8 / 3. = 1.27$

The cable length ratio is : 0.745

According to our WBS derived from the CMS one:

Coil en kILCU

Conductor and winding operation	813 + 22764= 23577	* 0.745	17565
Internal cryogenics	1608	* 0.745	1198
Suspension system	838	* 0.59	671
internal instrumentation	223	* 0.59	132
tooling, assembling	1344 + 18115= 19459	* 0.745	14497
qualification and partial testing	1451 + 102= 1553	* 1.	1553
final testing			
studies and supervision	12219 + 1687 = 13906	* 1.	13906
Total		61164	49522
with 10% more			54474
Lol estimate			47600

Ancillaries

Cryogenics and vacuum	9253	* 1.	9253
Electrical power circuit	2352	* 1.	2352
Control and safety systems	487	* 1.	487
Installation			
Implantation & integration	1414	* 0.59	834
Field mapping	770	* 1.	770
Total			13696
with 10% more			15066
Lol estimate			11000

Yoke and vacuum tank

this is obtained taking the weight and using a value for the machined and assembled iron which has been agreed upon: 6 ILCU/Kg

13 400 000 Kg → 80.4 MILCU

For CMS a price of 4.5 CHF/Kg was used.

The Lol estimate was 68.4 with 4.1 ILCU/Kg

Grand total	150 MILCU
Lol estimate	127

Manpower: this is an estimate of the in house manpower: 500 MY compared to 200 in the Lol. Taking one MY at 80kILCU

40 MILCU